

Abstract

VIBRATION-TYPE MEASUREMENT PICKUP

5

The measurement pickup, or transducer, includes at least one measuring tube (1) for the conveying of a fluid. The measuring tube has an inlet end and an outlet end and vibrates at least at times. For enabling the fluid to be measured to flow through the measuring tube, the measuring tube communicates, via a first tube segment (11) opening into the inlet end and via a second tube segment (12) opening into the outlet end, with a pipeline connected therewith. For the oscillatable holding of the measuring tube (1), the measurement pickup further includes a support element (2) having a first end piece (21) containing a passageway for the securement of the first tube segment (11) and having a second end piece (22) containing a passageway for the securement of the second tube segment (12). Each of the two tube segments (11, 12) extends through its respective one of the two passageways and each of the two passageways has an inner diameter, which is greater than an outer diameter of its associated tube segment, so that an intermediate space is formed between each of the associated tube segments and end pieces. The measurement pickup further includes at least one, preferably metal, first spring element (31) pushed onto one of the two tube segments. The spring element (31) fills the intermediate space formed between tube segment and end piece at least partially, with the spring element being arranged in the intermediate space in such a manner that it contacts, at least sectionally, both its associated tube segment and also its associated end piece in such a manner that it is subjected, at least sectionally, to radially acting, deformation forces. As a result of elastic deformations accompanying such deformation forces, the spring element is held pressed against the associated tube segment and the associated end piece, whereby such tube segment is locked securely in the associated passageway.